

FIG. 1

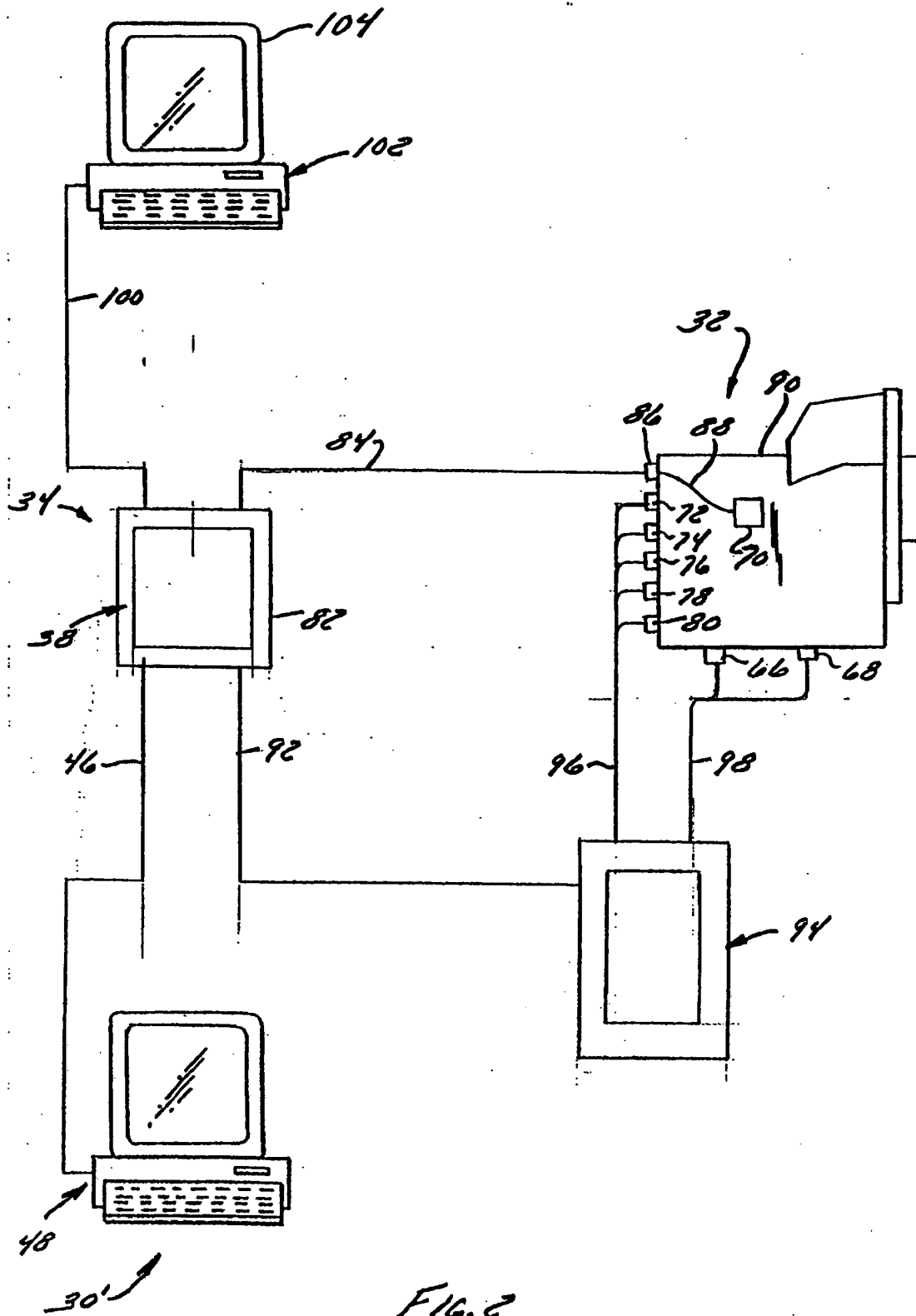


Fig. 2

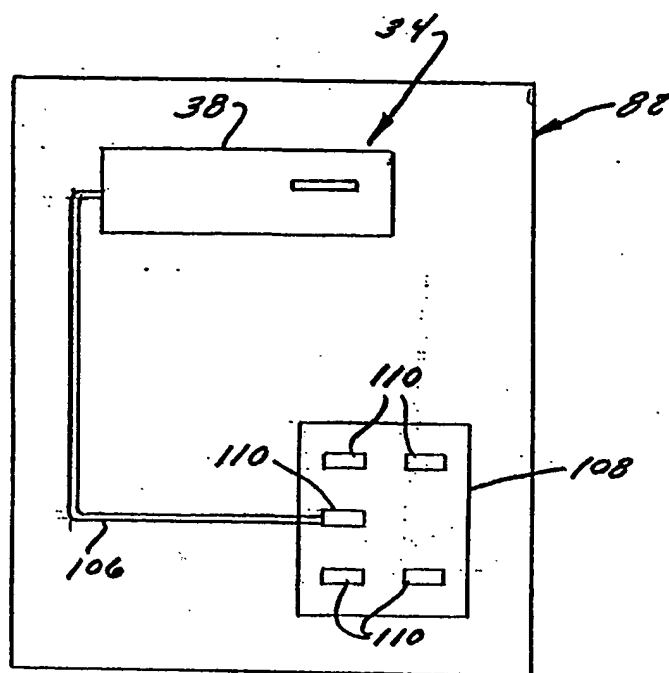


FIG. 3

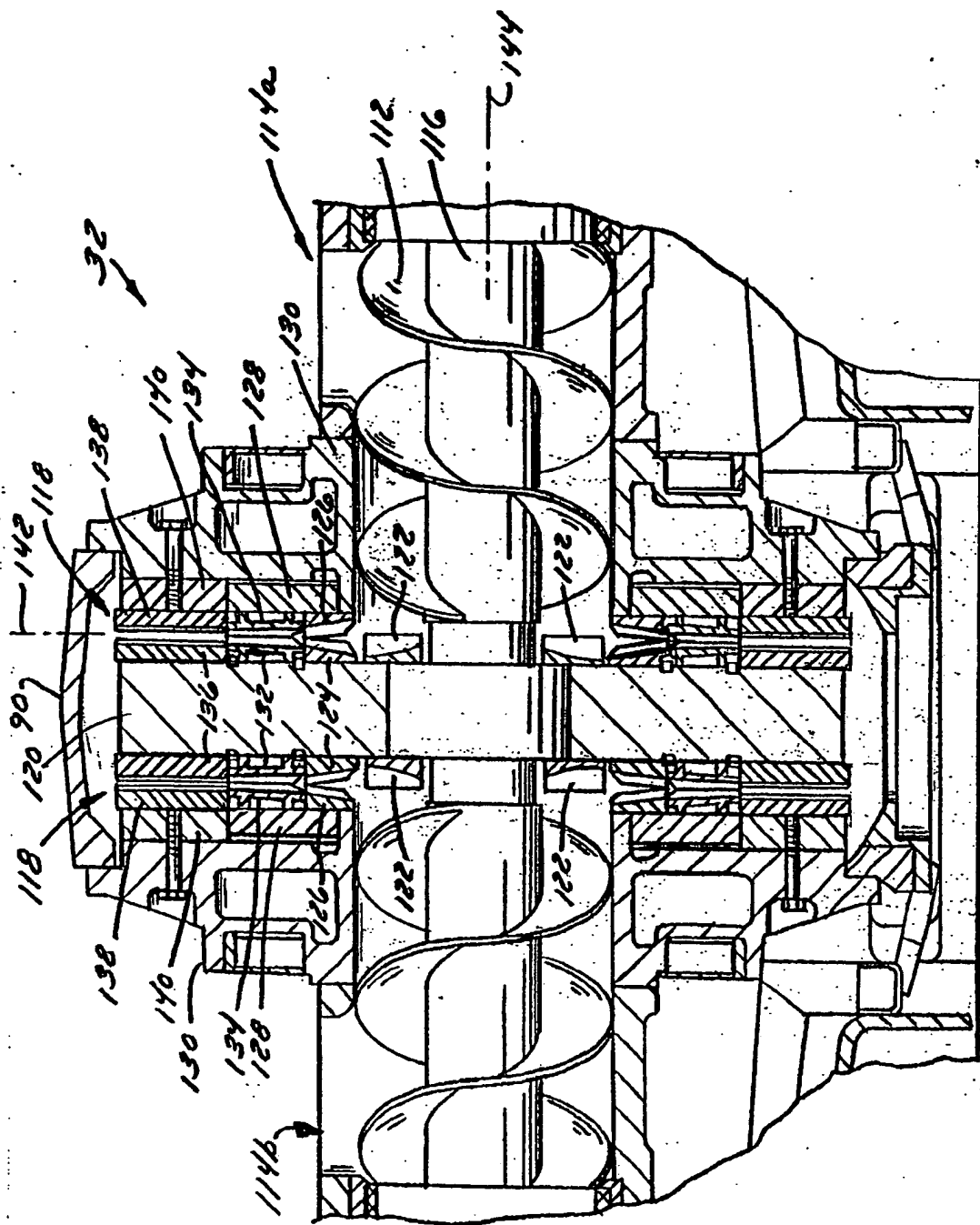


Fig. 4

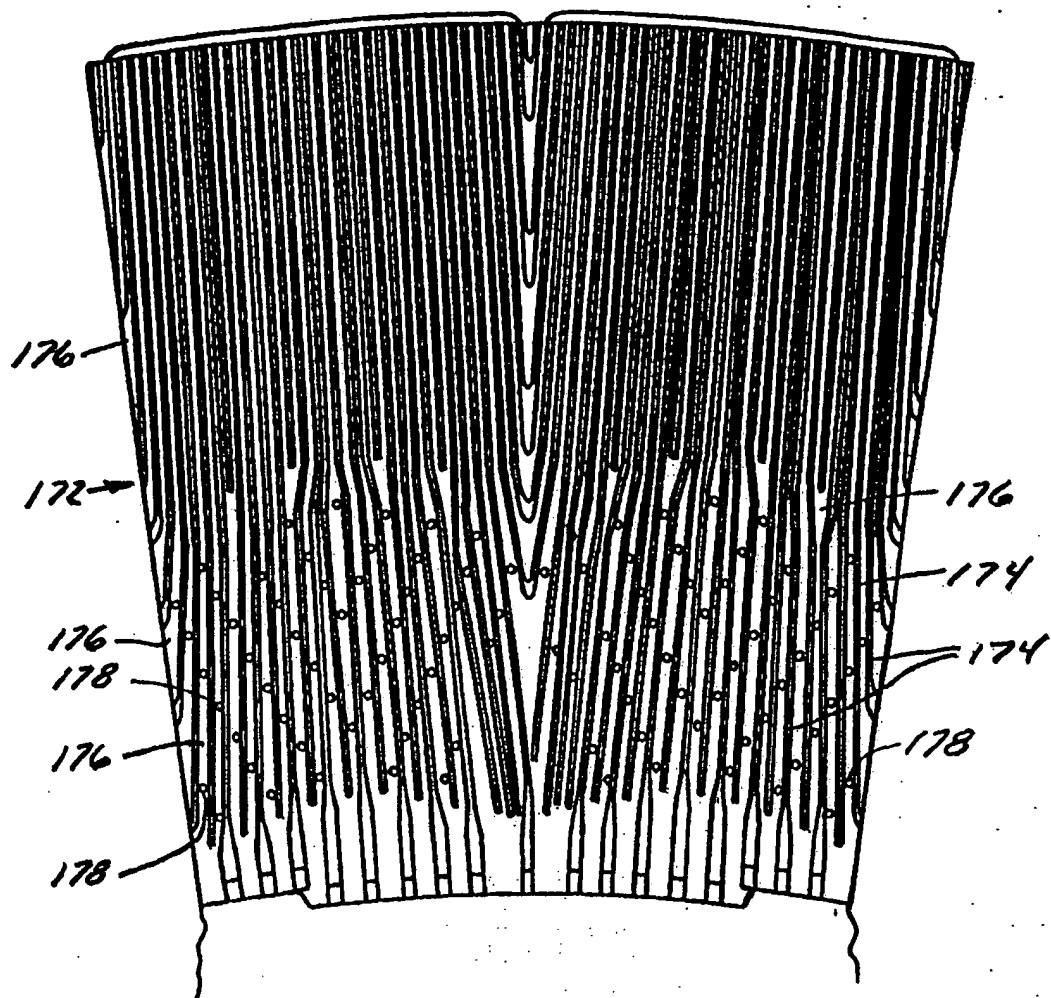


FIG. 6

034433-03001

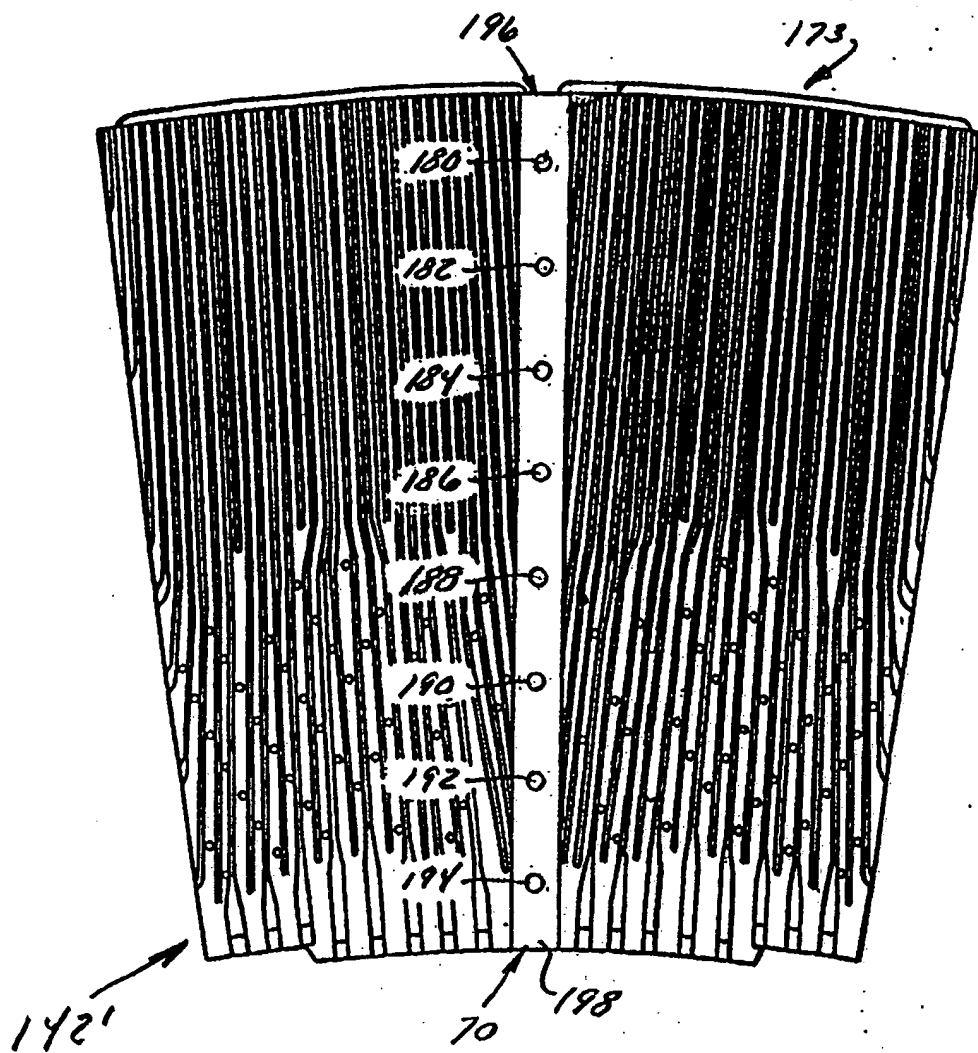


FIG. 7

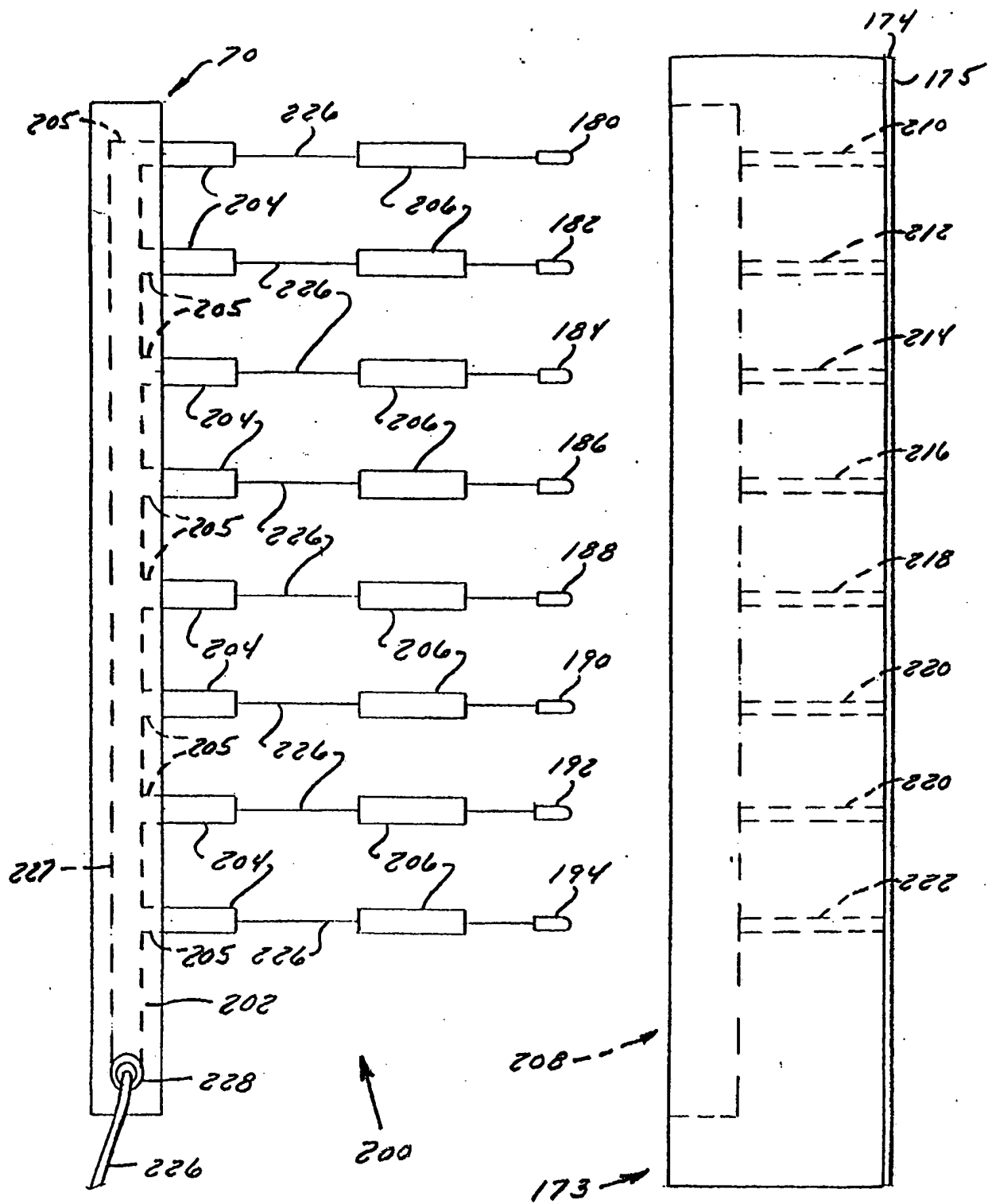
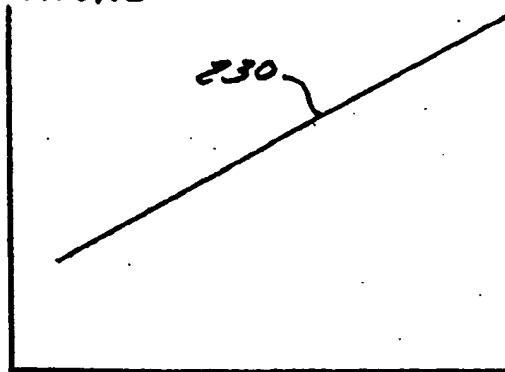


FIG. 8

2025 RELEASED

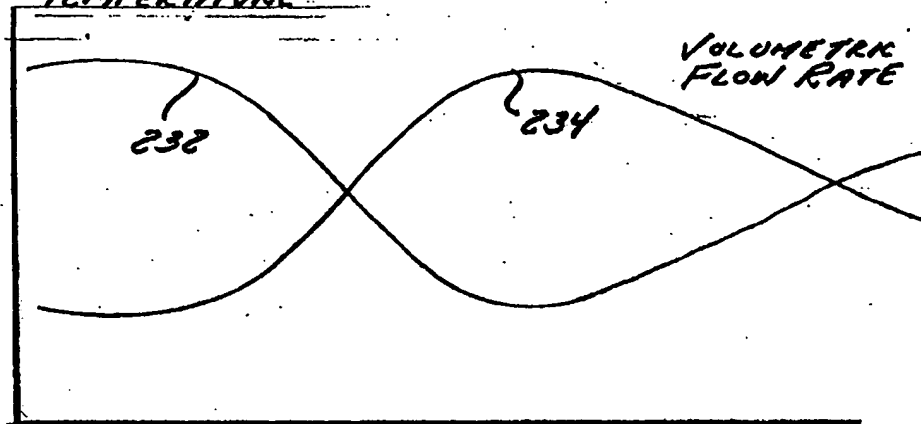
TEMPERATURE



FEED SCREW RPM

FIG. 9

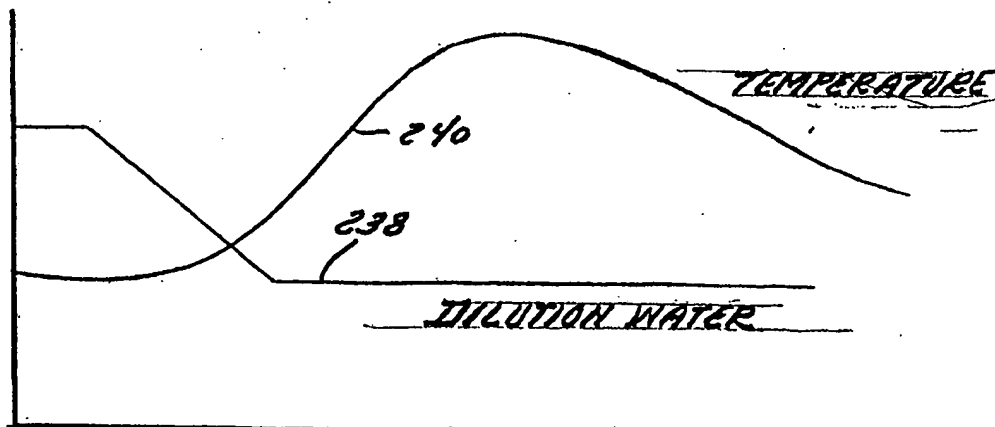
TEMPERATURE



VOLUMETRIC
FLOW RATE

TIME

FIG. 10



TEMPERATURE

DILUTION WATER

TIME

FIG. 11

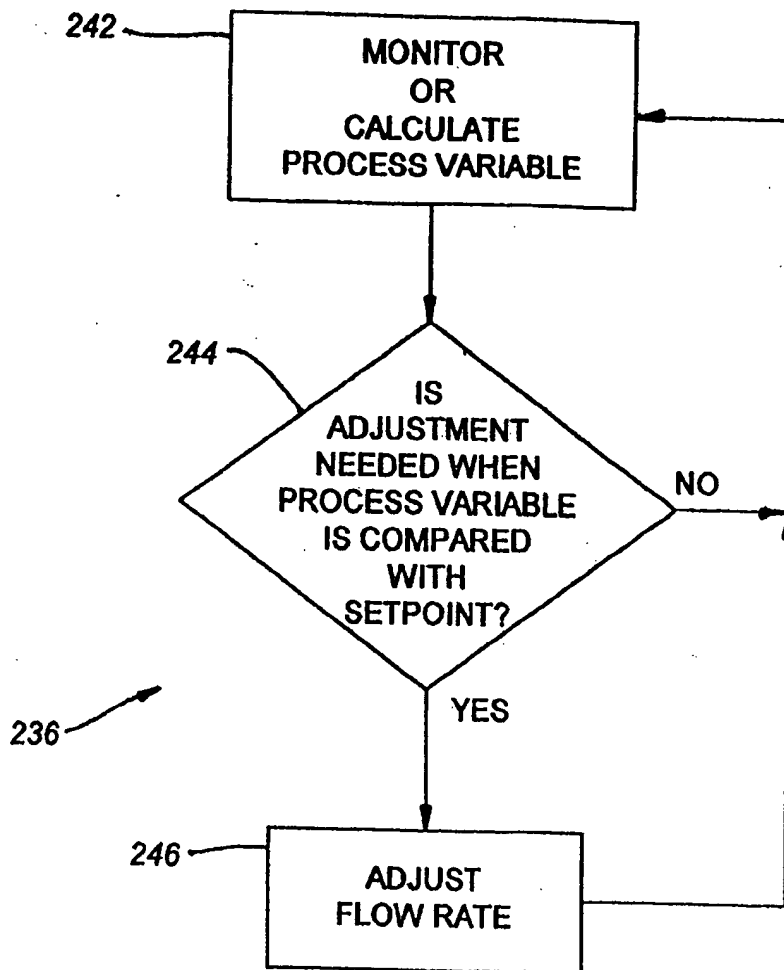


FIG. 12

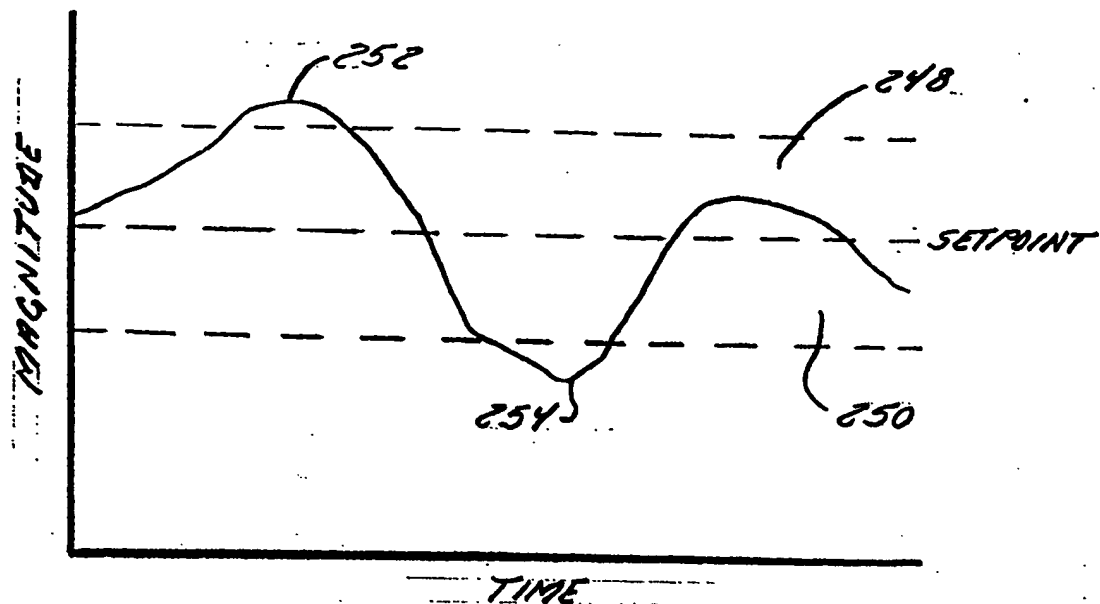


FIG. 13

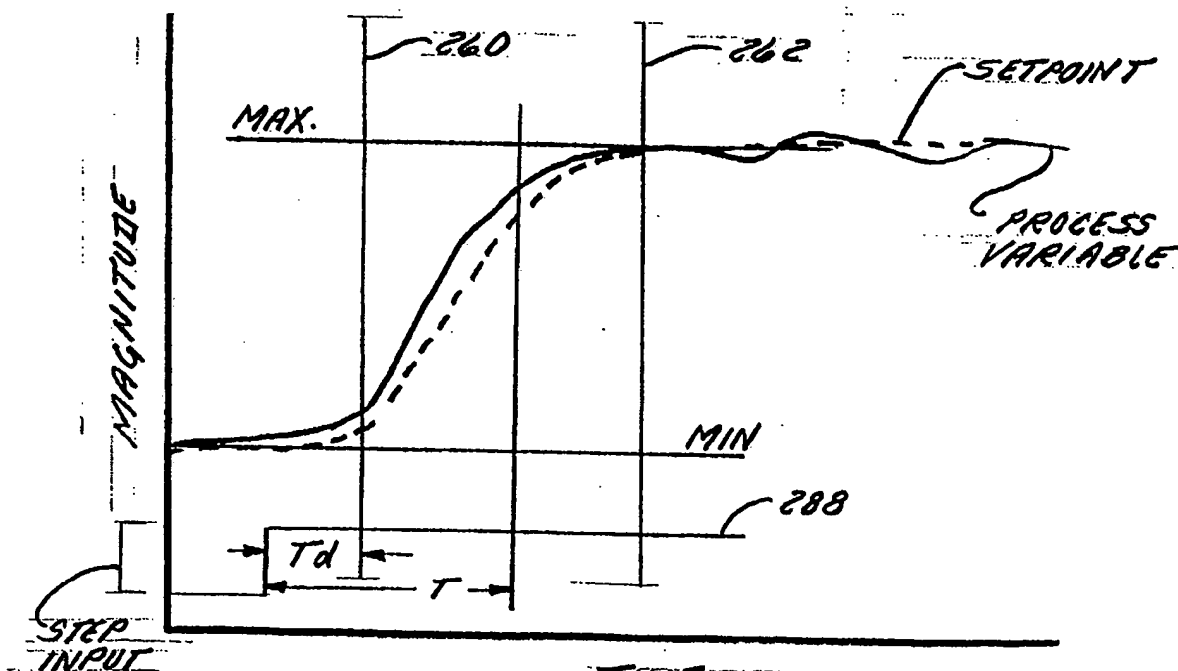


FIG. 15

FIG. 14

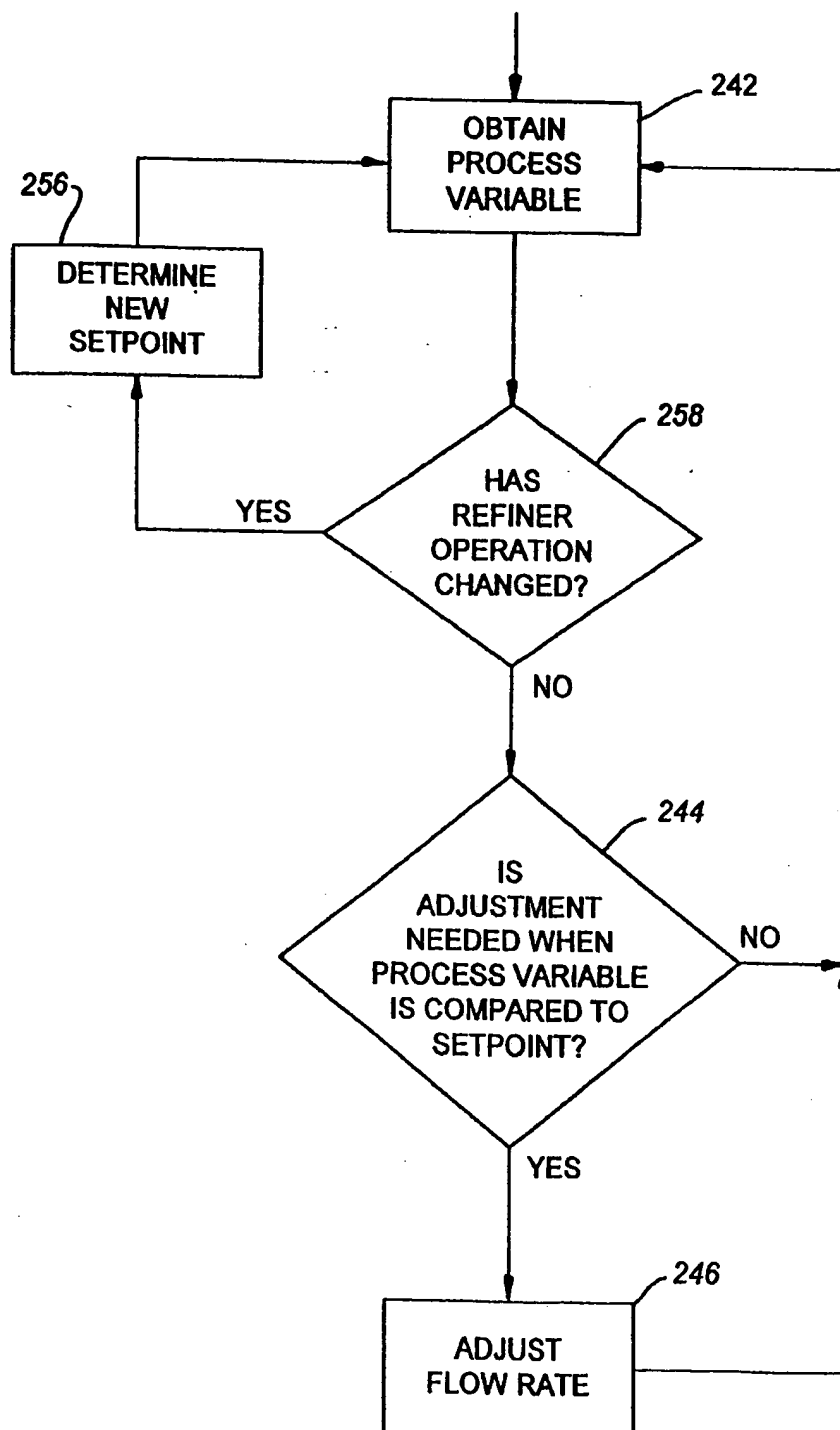


FIG. 14

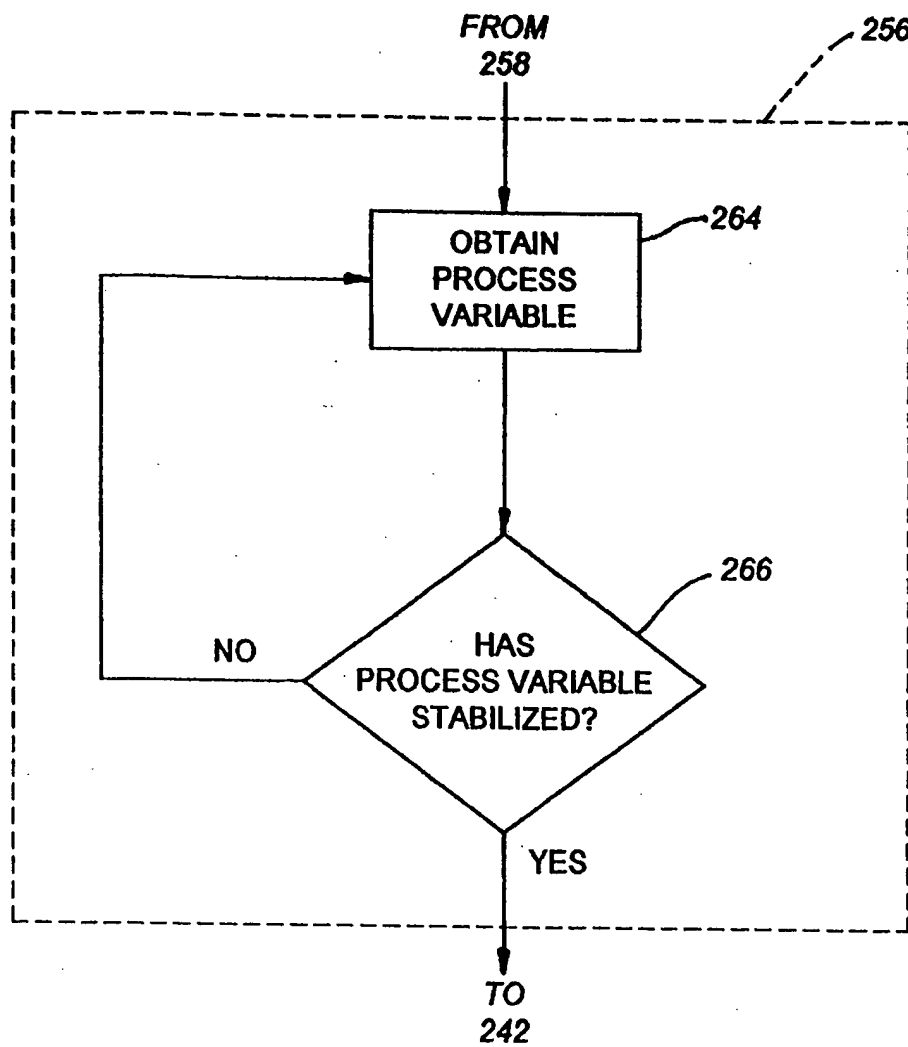


FIG. 16

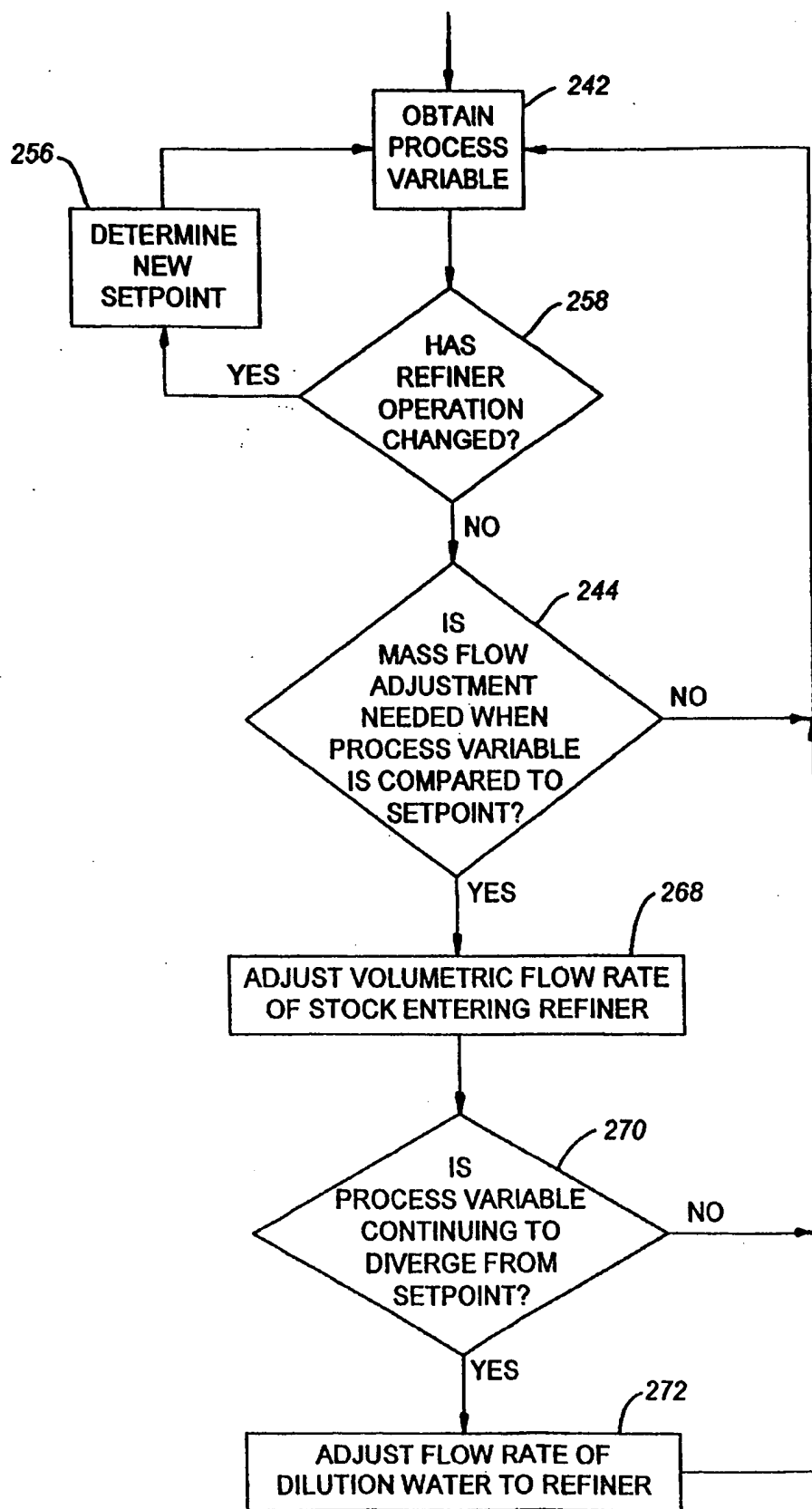


FIG.17

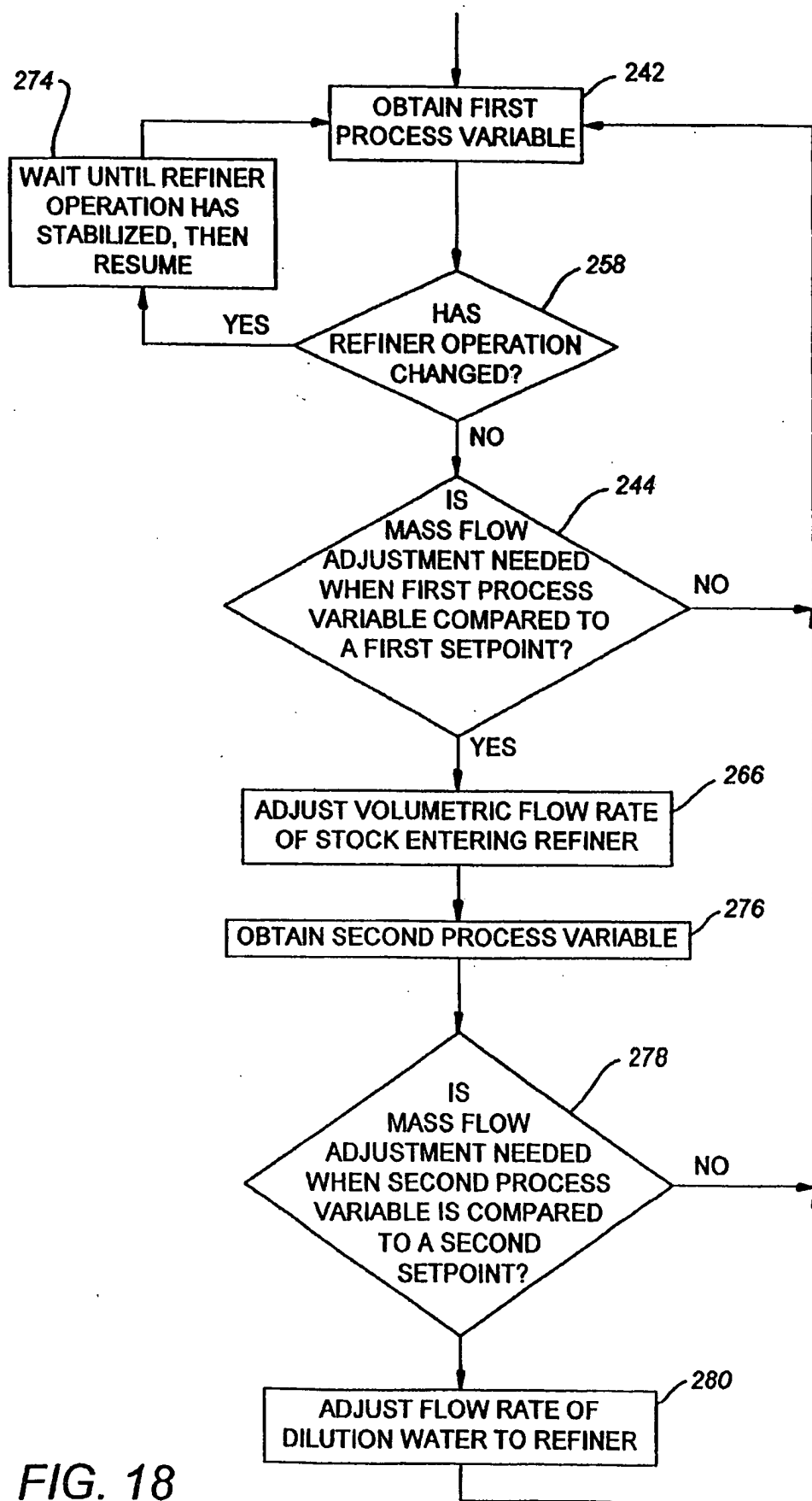


FIG. 18


```

graph TD
    Start(( )) --> 242[OBTAIN FIRST PROCESS VARIABLE]
    242 --> 258{HAS REFINER OPERATION CHANGED?}
    258 -- YES --> 274[WAIT UNTIL REFINER OPERATION HAS STABILIZED, THEN RESUME]
    274 --> 242
    258 -- NO --> 244{IS MASS FLOW ADJUSTMENT NEEDED WHEN FIRST PROCESS VARIABLE COMPARED TO A FIRST SETPOINT?}
    244 -- YES --> 266[ADJUST VOLUMETRIC FLOW RATE OF STOCK ENTERING REFINER]
    266 --> 276[OBTAIN SECOND PROCESS VARIABLE]
    276 --> 278{IS MASS FLOW ADJUSTMENT NEEDED WHEN SECOND PROCESS VARIABLE IS COMPARED TO A SECOND SETPOINT?}
    278 -- NO --> Exit(( ))
    278 --> 280[ADJUST FLOW RATE OF DILUTION WATER TO REFINER]
    280 --> 244

```

FIG. 19

FIG. 19

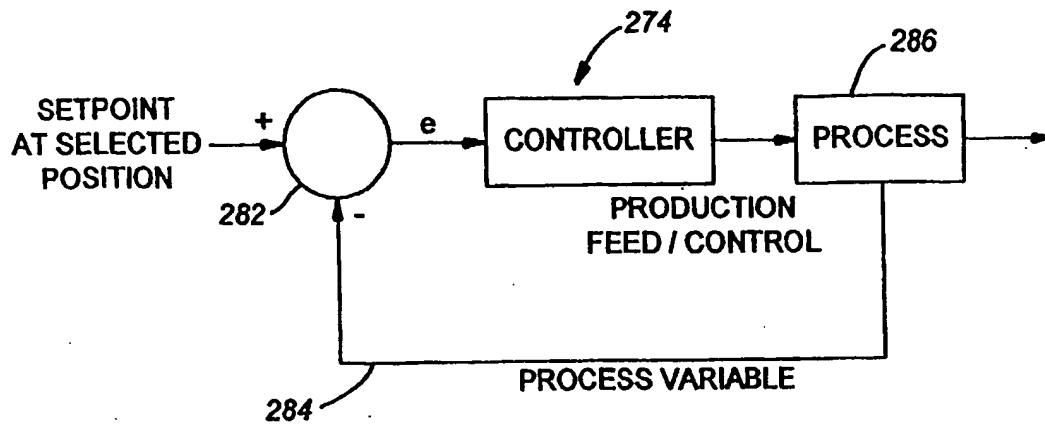


FIG. 20

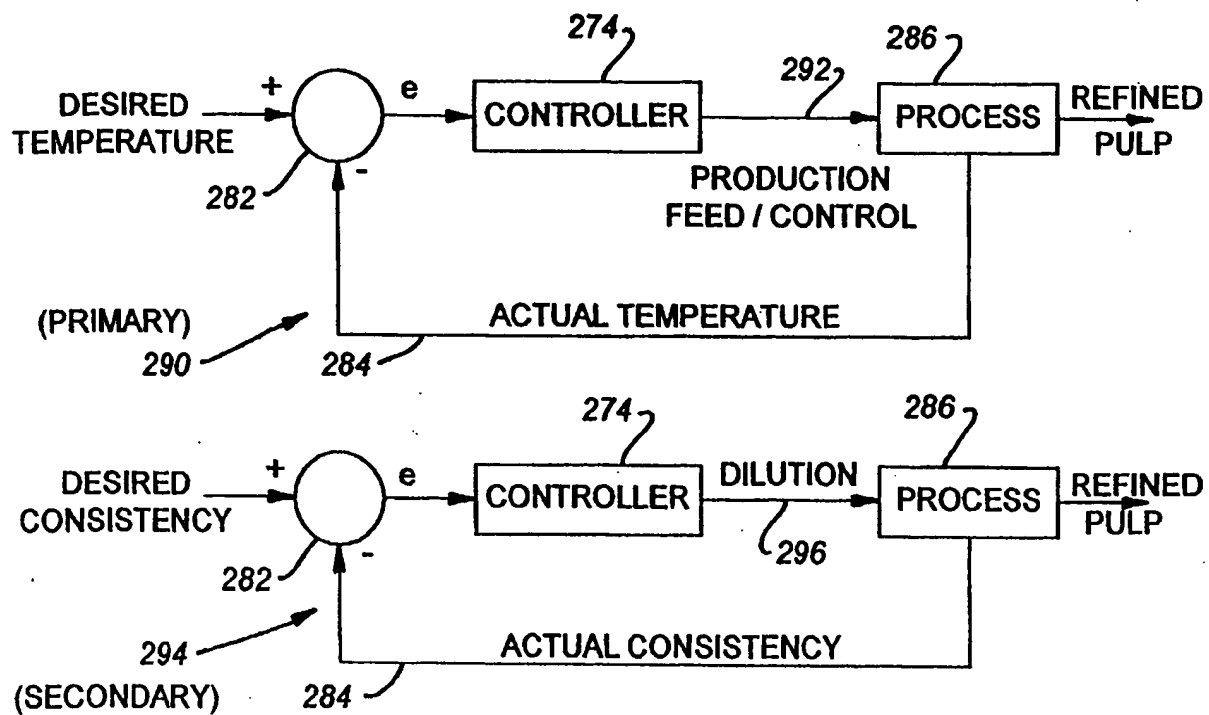


FIG.21

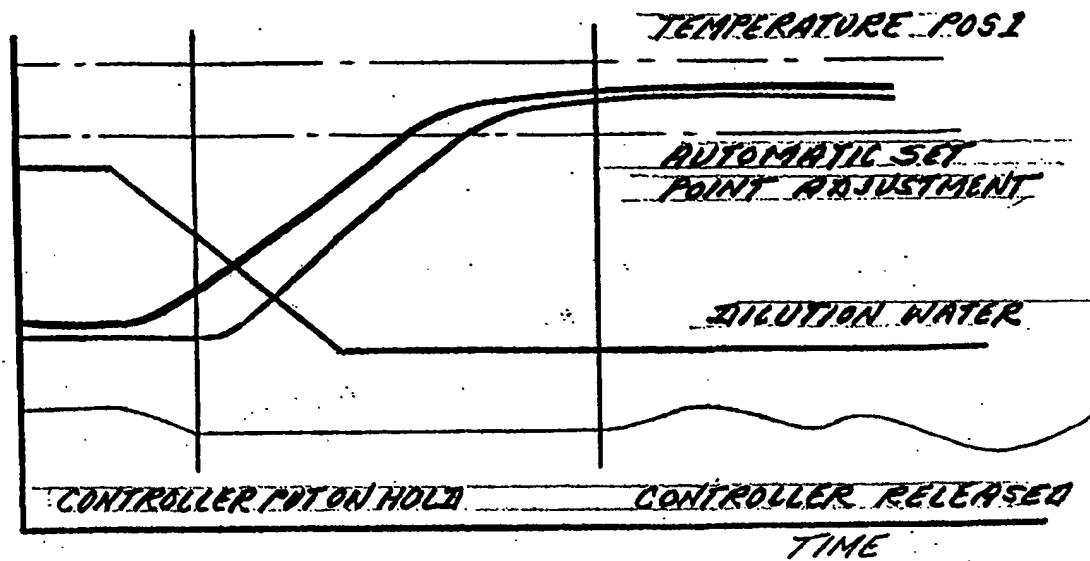
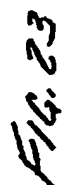


FIG. 22

10000-244800

INC: 270
TIME: 2:00e-004



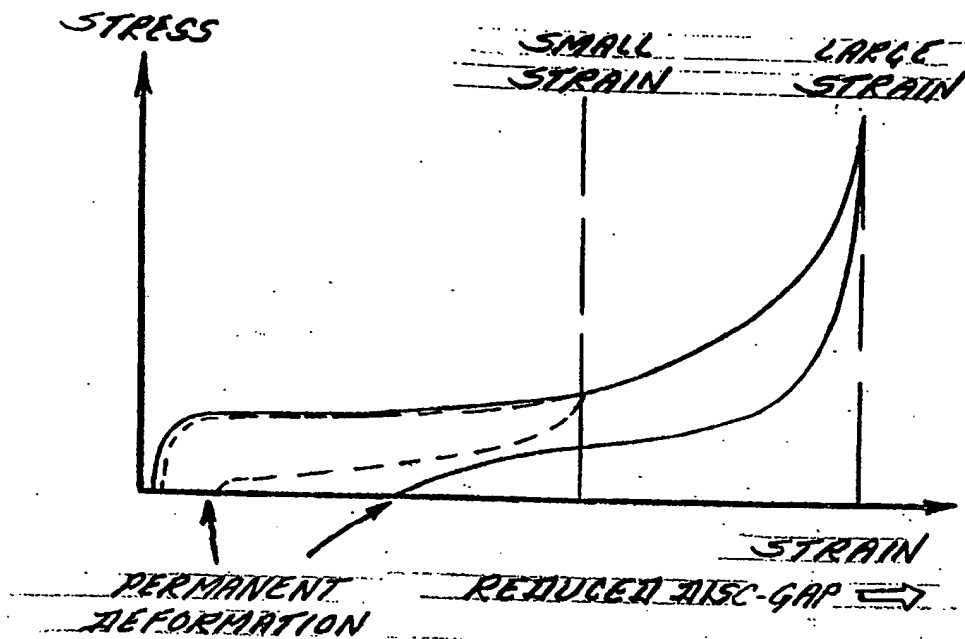


FIG. 24

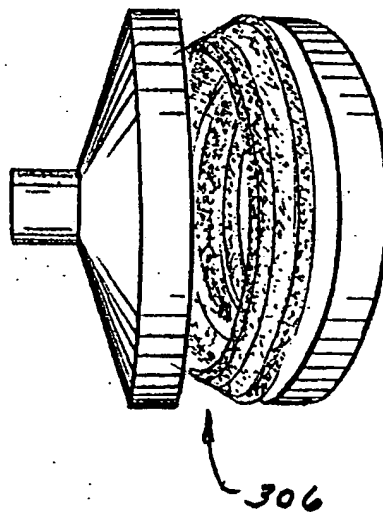
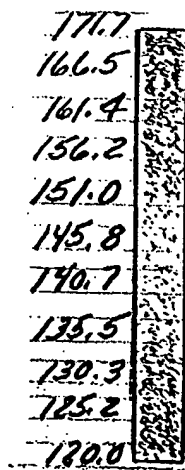
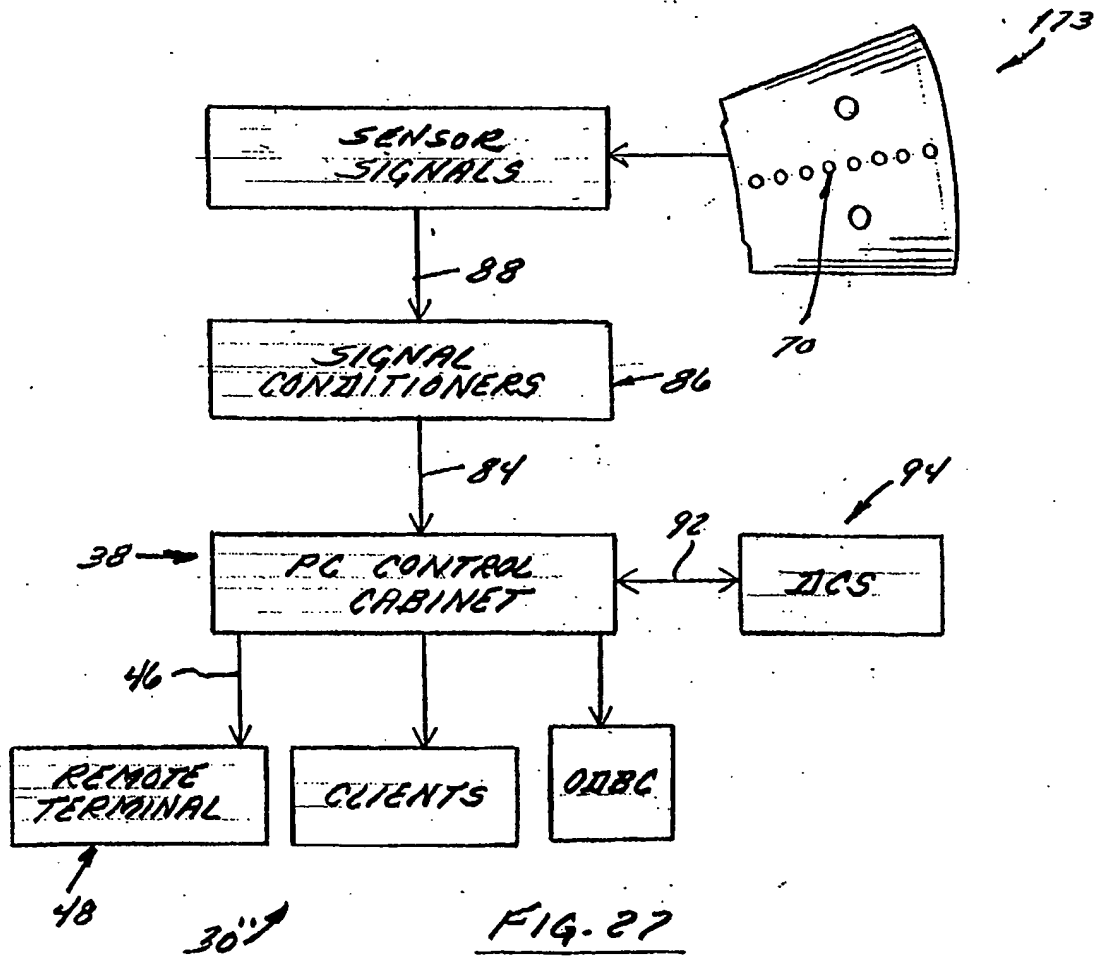
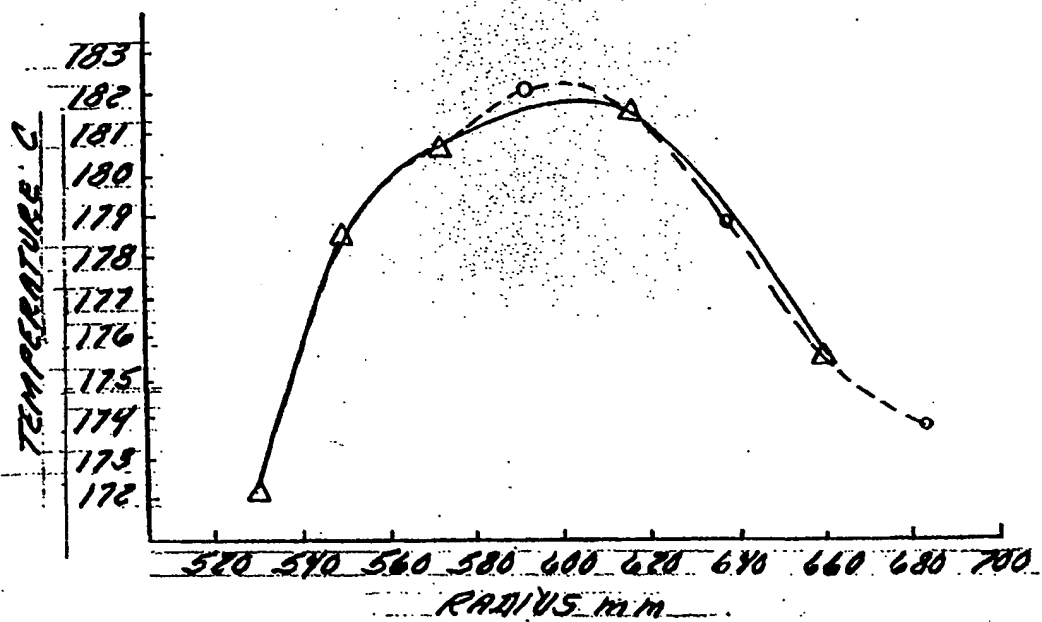


FIG. 25



REFINING ZONE TEMPERATURE C

PRODUCTION CONTROL MODE

MANUAL MODE

MOTOR LOAD MW

182 181 180 179 178 177

6.2 6.1 6.0 5.9 5.8 5.7 5.6 5.5 5.4 5.3 5.2 5.1 5.0

13.0 14.8 14.6 14.4 14.2 14.0 13.8 13.6 13.4 13.2 13.0

4600:28.6 4600:36.0 4600:45.5 4600:55.1 4601:04.4 4601:13.8 4601:23.1 4601:32.5 4601:41.9 4601:51.3 4602:00.7 4602:10.1 4602:19.5 4602:28.9 4602:38.3 4602:47.7 4602:57.1 4603:06.5 4603:15.9 4603:25.3 4603:34.7 4603:44.1 4603:53.5 4604:02.9 4604:12.3 4604:21.7 4604:31.1 4604:40.5 4604:49.9 4604:59.3 4605:08.7 4605:18.1 4605:27.5 4605:36.9 4605:46.3 4605:55.7 4606:05.1 4606:14.5 4606:23.9 4606:33.3 4606:42.7 4606:52.1 4607:01.5 4607:10.9 4607:20.3 4607:29.7 4607:39.1 4607:48.5 4607:57.9 4608:07.3 4608:16.7 4608:26.1 4608:35.5 4608:44.9 4608:54.3 4609:03.7 4609:13.1 4609:22.5 4609:31.9 4609:41.3 4609:50.7 4610:00.1 4610:09.5 4610:18.9 4610:28.3 4610:37.7 4610:47.1 4610:56.5 4611:05.9 4611:15.3 4611:24.7 4611:34.1 4611:43.5 4611:52.9 4612:02.3 4612:11.7 4612:21.1 4612:30.5 4612:39.9 4612:49.3 4612:58.7 4613:08.1 4613:17.5 4613:26.9 4613:36.3 4613:45.7 4613:55.1 4614:04.5 4614:13.9 4614:23.3 4614:32.7 4614:42.1 4614:51.5 4615:00.9 4615:10.3 4615:19.7 4615:29.1 4615:38.5 4615:47.9 4615:57.3 4616:06.7 4616:16.1 4616:25.5 4616:34.9 4616:44.3 4616:53.7 4617:03.1 4617:12.5 4617:21.9 4617:31.3 4617:40.7 4617:50.1 4618:00.5 4618:09.9 4618:19.3 4618:28.7 4618:38.1 4618:47.5 4618:56.9 4619:06.3 4619:15.7 4619:25.1 4619:34.5 4619:43.9 4619:53.3 4620:02.7 4620:12.1 4620:21.5 4620:30.9 4620:40.3 4620:49.7 4620:59.1 4621:08.5 4621:17.9 4621:27.3 4621:36.7 4621:46.1 4621:55.5 4622:04.9 4622:14.3 4622:23.7 4622:33.1 4622:42.5 4622:51.9 4623:01.3 4623:10.7 4623:20.1 4623:29.5 4623:38.9 4623:48.3 4623:57.7 4624:07.1 4624:16.5 4624:25.9 4624:35.3 4624:44.7 4624:54.1 4625:03.5 4625:12.9 4625:22.3 4625:31.7 4625:41.1 4625:50.5 4626:00.9 4626:09.3 4626:18.7 4626:28.1 4626:37.5 4626:46.9 4626:56.3 4627:05.7 4627:15.1 4627:24.5 4627:33.9 4627:43.3 4627:52.7 4628:02.1 4628:11.5 4628:20.9 4628:30.3 4628:39.7 4628:49.1 4628:58.5 4629:07.9 4629:17.3 4629:26.7 4629:36.1 4629:45.5 4629:54.9 4630:04.3 4630:13.7 4630:23.1 4630:32.5 4630:41.9 4630:51.3 4631:00.7 4631:10.1 4631:19.5 4631:28.9 4631:38.3 4631:47.7 4631:57.1 4632:06.5 4632:15.9 4632:25.3 4632:34.7 4632:44.1 4632:53.5 4633:02.9 4633:12.3 4633:21.7 4633:31.1 4633:40.5 4633:49.9 4633:59.3 4634:08.7 4634:18.1 4634:27.5 4634:36.9 4634:46.3 4634:55.7 4635:05.1 4635:14.5 4635:23.9 4635:33.3 4635:42.7 4635:52.1 4636:01.5 4636:10.9 4636:20.3 4636:29.7 4636:39.1 4636:48.5 4636:57.9 4637:07.3 4637:16.7 4637:26.1 4637:35.5 4637:44.9 4637:54.3 4638:03.7 4638:13.1 4638:22.5 4638:31.9 4638:41.3 4638:50.7 4639:00.1 4639:09.5 4639:18.9 4639:28.3 4639:37.7 4639:47.1 4639:56.5 4640:05.9 4640:15.3 4640:24.7 4640:34.1 4640:43.5 4640:52.9 4641:02.3 4641:11.7 4641:21.1 4641:30.5 4641:39.9 4641:49.3 4641:58.7 4642:08.1 4642:17.5 4642:26.9 4642:36.3 4642:45.7 4642:55.1 4643:04.5 4643:13.9 4643:23.3 4643:32.7 4643:42.1 4643:51.5 4644:00.9 4644:10.3 4644:19.7 4644:29.1 4644:38.5 4644:47.9 4644:57.3 4645:06.7 4645:16.1 4645:25.5 4645:34.9 4645:44.3 4645:53.7 4646:03.1 4646:12.5 4646:21.9 4646:31.3 4646:40.7 4646:50.1 4646:59.5 4647:08.9 4647:18.3 4647:27.7 4647:37.1 4647:46.5 4647:55.9 4648:05.3 4648:14.7 4648:24.1 4648:33.5 4648:42.9 4648:52.3 4649:01.7 4649:11.1 4649:20.5 4649:29.9 4649:39.3 4649:48.7 4649:58.1 4650:07.5 4650:16.9 4650:26.3 4650:35.7 4650:45.1 4650:54.5 4651:03.9 4651:13.3 4651:22.7 4651:32.1 4651:41.5 4651:50.9 4652:00.3 4652:09.7 4652:19.1 4652:28.5 4652:37.9 4652:47.3 4652:56.7 4653:06.1 4653:15.5 4653:24.9 4653:34.3 4653:43.7 4653:53.1 4654:02.5 4654:11.9 4654:21.3 4654:30.7 4654:40.1 4654:49.5 4654:58.9 4655:08.3 4655:17.7 4655:27.1 4655:36.5 4655:45.9 4655:55.3 4656:04.7 4656:14.1 4656:23.5 4656:32.9 4656:42.3 4656:51.7 4657:01.1 4657:10.5 4657:19.9 4657:29.3 4657:38.7 4657:48.1 4657:57.5 4658:06.9 4658:16.3 4658:25.7 4658:35.1 4658:44.5 4658:53.9 4659:03.3 4659:12.7 4659:22.1 4659:31.5 4659:40.9 4659:50.3

62-513

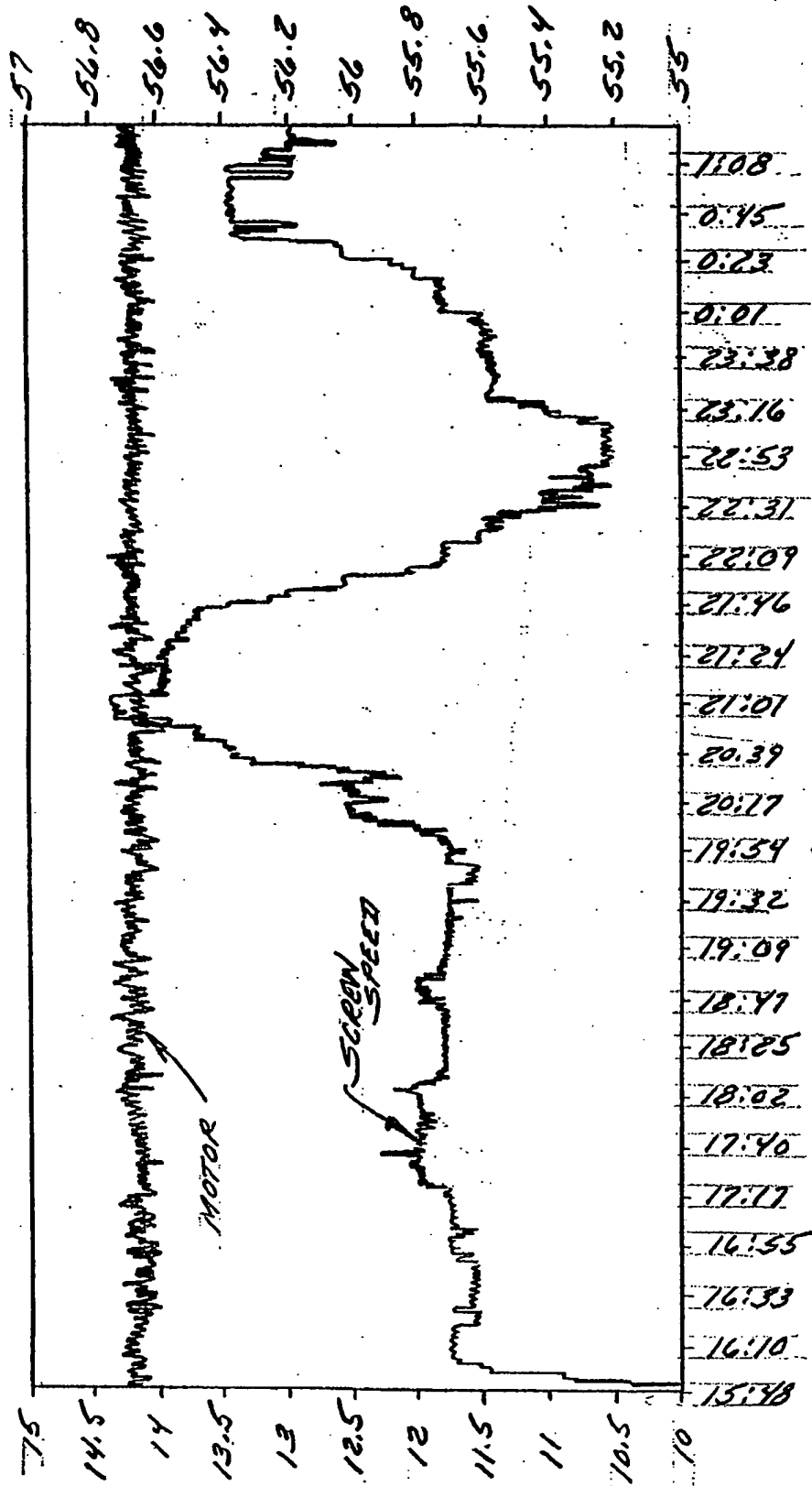


FIG. 30